

## II. CLAIM AMENDMENTS

1. (Currently Amended) A method of determining the position of a mobile communications device within a cellular network, the method comprising the steps of:

transmitting data to the mobile communication device from the cellular network, said data identifying to the mobile communication device a pre-determined list of radio channels corresponding to respective radio transmitters of the cellular network, said pre-determined list having been determined beforehand on the basis of the approximate position of the mobile communication device and in accordance with geometrical requirements for position determination, said pre-determined list having been stored in a central element; and

causing the mobile communication device to listen on said identified channels, or on other channels excluding said identified channels, and to determine from information transmitted over the listened to channels data values related to the relative geometry of the mobile communication device and the radio transmitters transmitting the listened to channels; and

determining the position of the mobile communication device using said determined data values.

2. (Original) A method according to claim 1, wherein said transmitters are provided by respective base transceiver stations and the data transmitted to the mobile device identifying the list of radio channels comprises a set of radio channel numbers known to the mobile device.

3. (Previously Amended) A method according to claim 1, wherein said data values are time relationship values related to the transmission delay times between the mobile device and the radio transmitters transmitting the listened to channels.

4. (Original) A method according to claim 3, wherein the time relationship values are Observed Time Differences (OTD) each being the difference between the transmission delay time between the mobile device and one of the radio transmitters transmitting the listened to channels, and the transmission delay time between the mobile device and a radio transmitter of a base transceiver station currently serving the mobile device.

5. (Previously Amended) A method according to claim 3, wherein said time relationship values are sent by the mobile communications device to the network where said determining step is carried out.

6. (Previously Amended) A method according to claim 1, wherein the list of radio channels identified to the mobile device contains those channels which the mobile device should try to listen to in order to obtain said data values from which the position of the mobile device can be determined.

7. (Currently Amended) Apparatus for determining the position of a mobile communications device within a cellular network, the apparatus comprising:

a base transceiver station for transmitting data to the mobile communication device from the cellular network, said data identifying to the mobile communication device a pre-determined list of radio channels corresponding to respective radio transmitters of the cellular network, said pre-determined list having been determined on the basis of the approximate position of the mobile communication device and in accordance with geometrical requirements for position determination, said pre-determined list having been stored in a central element;

a radio receiver at the mobile communication device for listening on said identified channels, or on other channels excluding said identified channels;

first signal processing means coupled to said radio receiver for determining from information transmitted over the listened to channels data values related to the relative geometry of the mobile communication device and the radio transmitters transmitting the listened to channels; and

second signal processing means for computing the position of the mobile communication device using said determined data values.

8. (Currently Amended) A mobile communications device comprising:

a radio receiver for receiving data transmitted from a servicing base transceiver station of a cellular radio network, said data identifying to the mobile communication device a pre-determined list of radio channels corresponding to respective radio transmitters of the cellular network, and said pre-determined list having been determined on the basis of the approximate position of the mobile communication device and in accordance with geometrical requirements for position determination, and said radio receiver being arranged to listen on said identified channels, or on other channels excluding said identified channels, said pre-determined list having been stored in a central element;

first signal processing means coupled to said receiver for determining from information transmitted over the listened to channels data values related to the relative geometry of the mobile communication device and the radio transmitters transmitting the listened to channels; and

a radio transmitter for transmitting said determined data values to said serving base transceiver station.

9. (Previously Added) The method of claim 1 further comprising the step of storing in a central element a pre-determined list for each respective radio transmitter in the cellular network.

10. (Previously Added) The method of claim 9 wherein the central element is a mobile positioning center.

11. (Previously Added) The method of claim 1 further comprising the step of causing the mobile communications device to use pre-selected radio transmitters in the cellular network for position determination measurements.

12. (Previously Added) The method of claim 1 wherein the pre-determined list comprises a list of radio transmitters in the network suitable to determine the position of the mobile communications device being served by a serving radio transmitter, based on a respective location of each radio transmitter.

13. (Previously Added) The method of claim 1 wherein each radio transmitter in the network has a corresponding pre-determined list of associated radio transmitters in the network.

14. (Previously Added) The method of claim 1 wherein the pre-determined list of radio channels corresponding to radio transmitters is independent of a signal transmission strength between each radio transmitter and the mobile communications device.

15. (Previously Added) The method of claim 1 further comprising the step of pre-storing the pre-determined list of radio channels by associating other radio transmitters based on position with a selected serving radio transmitter, wherein each radio transmitter in the network has an associated stored pre-determined list.